

**U.S. Department of Energy
Workshop on Standards for
Distribution Transformers**

Manufacturer Impact Analysis

November 1, 2000

Michael Scholand
Arthur D. Little, Inc.
2111 Wilson Blvd., Suite 1000
Arlington, VA 22207-3001
Scholand.Michael@adlittle.com

Table of Contents

1	Analytic Framework
2	Phase I Industry Profile
3	Phase II Strawman GRIM
4	Phase III Final GRIM and Subgroup
5	Summary

The Manufacturers Impact Analysis (MIA) fulfils a legislative requirement to determine if the proposed standard is economically justified.

- The Department of Energy will consider:
 - The economic impact of the standard on manufacturers and on the consumers of the products subject to such a standard.
 - The impact of any lessening of competition, that is likely to result from the imposition of the standard.

MIA Purpose: Provide information to evaluate impacts on manufacturers. Assess the financial burden of standards on manufacturers and report on employment and manufacturing impacts.

The MIA is a three phase process, and is both concurrent and coordinated with activities throughout the rulemaking process.

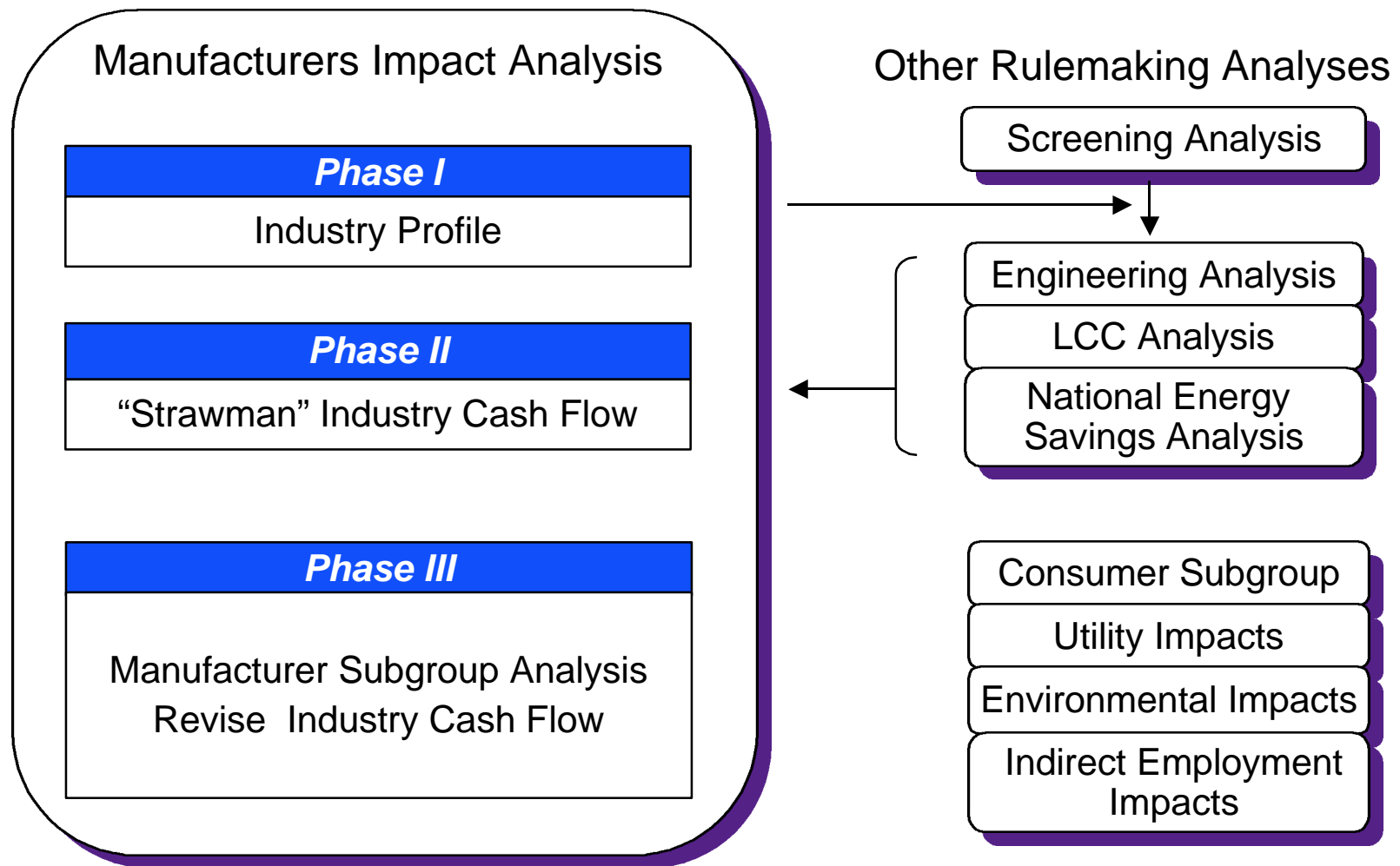


Table of Contents

1	Analytic Framework
2	Phase I Industry Profile
3	Phase II Strawman GRIM
4	Phase III Final GRIM and Subgroup
5	Summary

The industry profile consists of two main components, industry characterization and issue identification.

Industry Characterization

- Evaluation of current and past industry structure and market characteristics (e.g. market share, number of firms, fiscal health)
- Sources: ORNL database, NEMA, interviews with manufacturers
- Produce an industry profile report with aggregated findings and characteristics

Issue Identification

- Meetings will be held to identify critical issues that require special consideration in the MIA, for example:
 - Types or groups of manufacturers
 - Access to technology
 - Potential regulatory scenarios

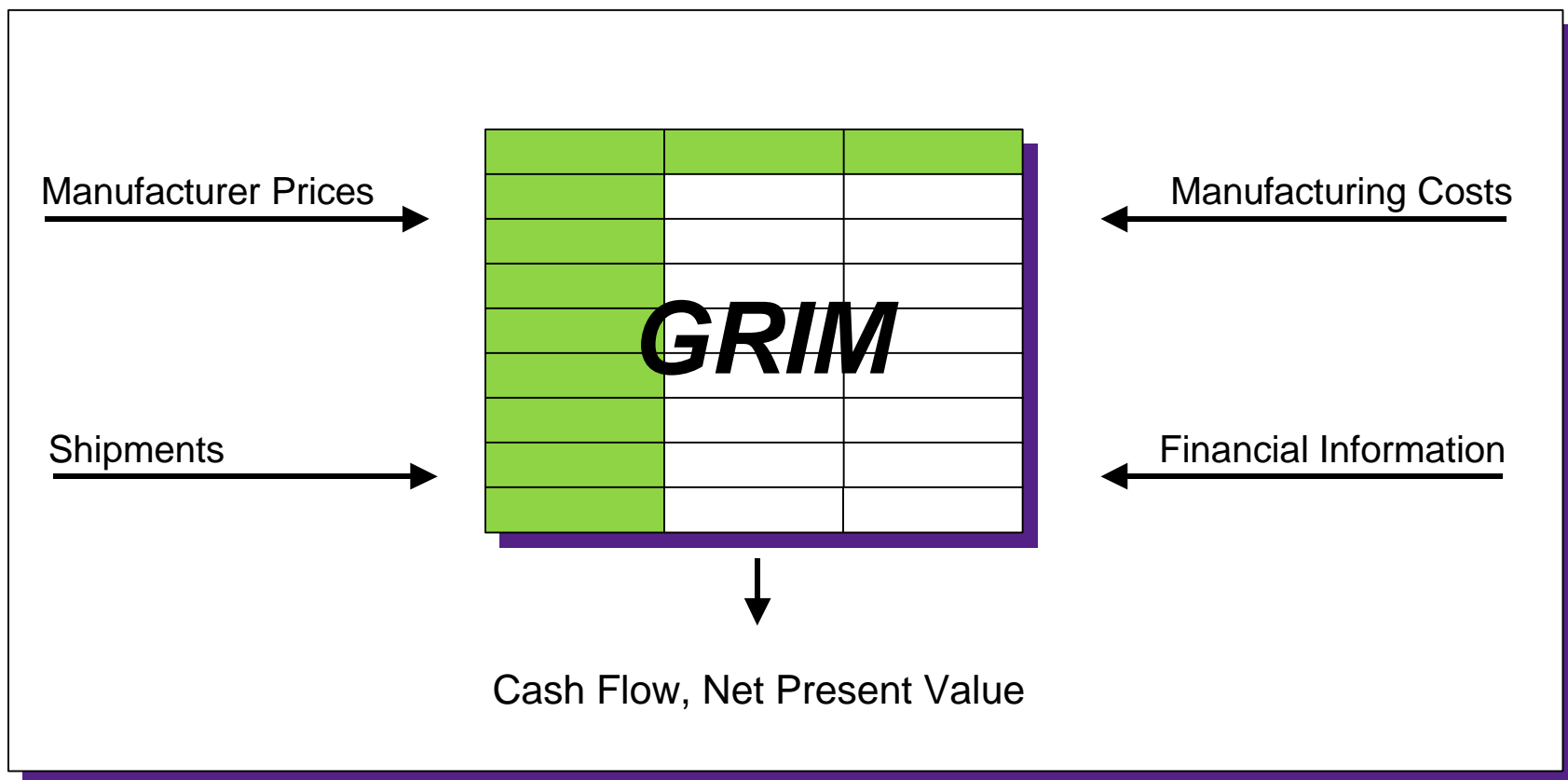
Table of Contents

1	Analytic Framework
2	Phase I Industry Profile
3	Phase II Strawman GRIM
4	Phase III Final GRIM and Subgroup
5	Summary

Standards can impact industry in three ways. The DOE utilizes a financial tool to assess these impacts.

- A change in standards can affect the industry in three ways:
 - Require additional investment
 - Raise production costs
 - Affect revenue through changing prices and sales
- The analysis conducted by the DOE is quantified using the Government Regulatory Impact Model (GRIM). This financial modeling tool estimates the impacts of standards and other regulations on manufacturers.
 - Based on discounted cash flow sectoral analysis
 - Creates full computations of cash flow for both base case (absence of standards) and standards case
 - Computes Industry Values (NPV) for both scenarios
 - Offers numeric and graphical comparisons
 - Facilitates communicating anticipated impacts to all stakeholders
 - Allows aggregation of impacts on individual companies

GRIM uses four key inputs: manufacturer prices, manufacturing costs, shipments, and financial information to calculate cash flows used for arriving at the industry value.



A “strawman” GRIM is prepared in consultation with manufacturers, distributors, consumers and other stake holders. The “strawman” GRIM provides a starting point for discussion of impacts

- Forecasted manufacturer prices would be estimated with input from utilities, distributors, NEMA, manufacturers and the Life Cycle Cost analysis.
- Shipment forecasts would be based on input from manufacturers, NEMA, ORNL, and the National Energy Savings analysis.
- Manufacturing cost estimates would be made with data acquired from the ORNL engineering analysis.
- Financial information (e.g., tax rate, working capital, depreciation, etc.) from manufacturers’ 10-K statements and other publicly available industry statistics (e.g., S&P Reports, ValueLine Industry Statistics). These data can also be derived from the Industry Profile completed in Phase 1 of the MIA.

Table of Contents

1	Analytic Framework
2	Phase I Industry Profile
3	Phase II Strawman GRIM
4	Phase III Final GRIM and Subgroup
5	Summary

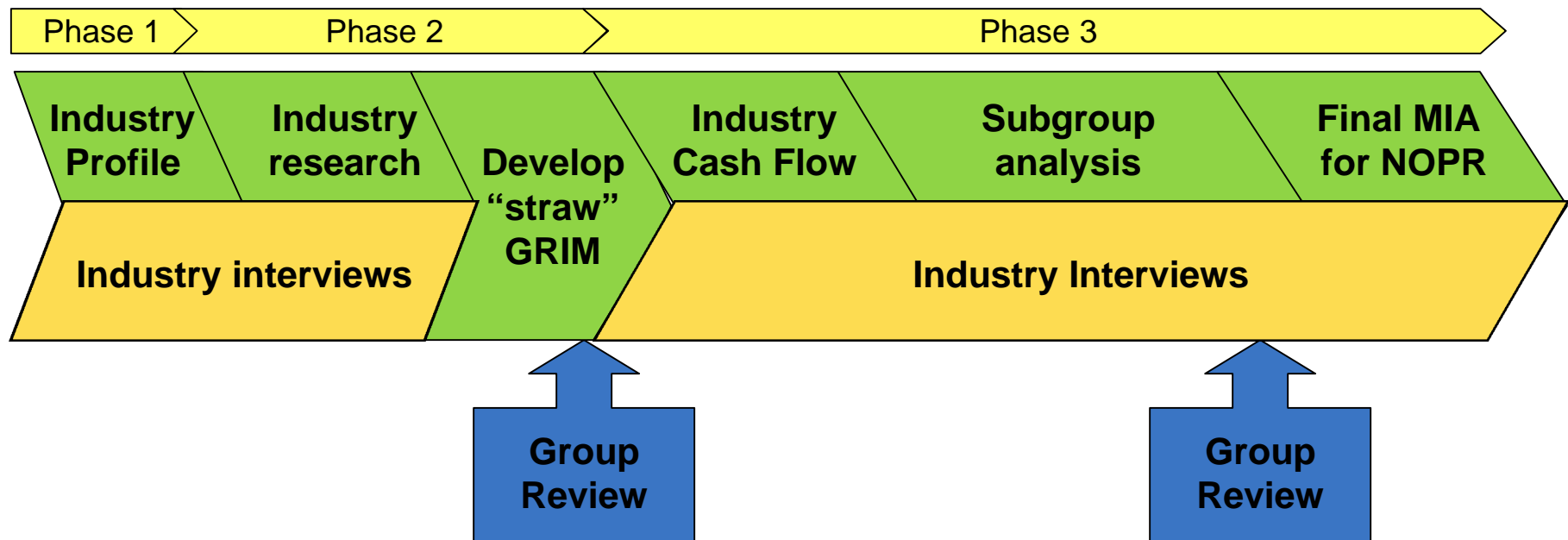
In Phase III, work on industry subgroups and regulatory impacts on the industry as a whole will be conducted.

- Identify industry subgroups requiring special examination
- Work with subgroup members to tailor a separate subgroup GRIM
- Consider and focus on key issues of importance to the subgroup
- Examine industry regulatory impacts that are not purely financial:
 - Employment - changes in domestic industry employment levels
 - Capacity Utilization - changes in domestic manufacturing capacity
 - Cumulative Burden - combined impact of other recent or forthcoming federal regulations
- Conduct separate interviews with subgroup members to focus on these issues; enter confidentiality contracts
- Review materials with subgroup members during their development

Table of Contents

1	Analytic Framework
2	Phase I Industry Profile
3	Phase II Strawman GRIM
4	Phase III Final GRIM and Subgroup
5	Summary

The MIA consists of several steps and informal group reviews that will be conducted throughout the rulemaking process:



The final questions on the Manufacturers Impact Analysis:

- Why is the DOE conducting an MIA?
 - To evaluate the financial, employment and manufacturing impacts of regulations.
- How will the MIA assess this impact?
 - Quantitative: using GRIM, a discounted cash flow model
 - Qualitative: assessing changes in employment, capacity utilization, cumulative burden
- What are the data sources for the MIA?
 - Publicly available information
 - Interviews and regular consultation with industry and other key stakeholders
 - Coordination with the other analyses in the Rulemaking process
- Will data provided by manufacturers be kept confidential?
 - Confidentiality agreements between DOE contractors and industry
 - All data reported to DOE and the public will be aggregated
 - No report of data points where two or fewer companies are reporting